

GV-600B, GV-650B, GV-800B

There are two types of GV-600B / GV-650B / GV-800B Card: PCI and PCI-E. Both types of the GV-600B / GV-650B / GV-800B Card provide up to 16 video channels and 4 audio channels. The GV-600B, GV-650B and GV-800B Cards have the same appearances and similar system requirements so that we introduce the three cards together in this installation guide. However, you may choose among the three according to your need for recording rate.

Minimum System Requirements

OS	32-bit	Windows XP / Vista / 7 / 8 / Server 2008	
	64-bit	Windows 7 / 8 / Server 2008 / Server 2012	
CPU	GV-600B	Pentium 4, 2.0 GHz	
	GV-600B x 2	Pentium 4, 2.6 GHz with Hyper Threading	
	GV-650B	Pentium 4, 2.4 GHz	
	GV-650B x 2	Pentium 4, 2.8 GHz with Hyper Threading	
	GV-800B	Pentium 4, 3.0 GHz with Hyper-Threading	
	GV-800B x 2	Pentium 4, 3.0 GHz Dual Core	
RAM	GV-600B / 650B / 800B	Windows XP	2 x 512 MB Dual Channels
		Windows Vista / 7 / 8 / Server 2008 / Server 2012	2 x 1 GB Dual Channels
	GV-600B x 2 / 650B x 2 / 800B x 2	2 x 1 GB Dual Channels	
HDD	GV-600B / 650B / 800B	80 GB	
	GV-600B x 2 / 650B x 2 / 800B x 2	160 GB	
VGA	GV-600B / 650B / 800B	ATI Radeon X600 / NVIDIA 6200	
	GV-600B x 2 / 650B x 2		
	GV-800B x 2	ATI Radeon X1300 PCI-E / NVIDIA GeForce 7300 PCI-E	
DirectX	9.0c		

Packing List

1. GV-600B, GV-650B or GV-800B Card x 1
2. 1-16 Cams with 4-Port Audio DVI-Type Cable
x 1 / 1-8 Cams with 4-Port Audio DVI-Type
Cable x 1 / 1-4 Cams with 4-Port Audio DVI-
Type Cable x 1
3. Hardware Watchdog Jumper Wire x 1
4. Software DVD x 1

Note: The 1-16 Cams with 4-Port Audio DVI-Type cable is supplied with GV-600B / GV-650B / GV-800B card with 16 video inputs, the 1-8 Cams with 4-Port Audio DVI-Type cable is supplied with GV-600B / GV-650B / GV-800B card with 8 video inputs, while the 1-4 Cams with 4-Port Audio DVI-Type cable is supplied with GV-600B / GV-650B / GV-800B card with 4 video inputs.

Connecting One GV-600B / GV-650B / GV-800B Card

There are two types of GV-600B / GV-650B / GV-800B Card: PCI and PCI-E. Here we take the GV-600B / GV-650B / GV-800B Card with PCI interface for example to illustrate the connection.

- Connect the video / audio cables into the DVI ports of the GV-600B / GV-650B / GV-800B Card.
- Connect the supplied Hardware Watchdog Jump Wire (Figure 3).

Video 1 ~ 16 (Black)

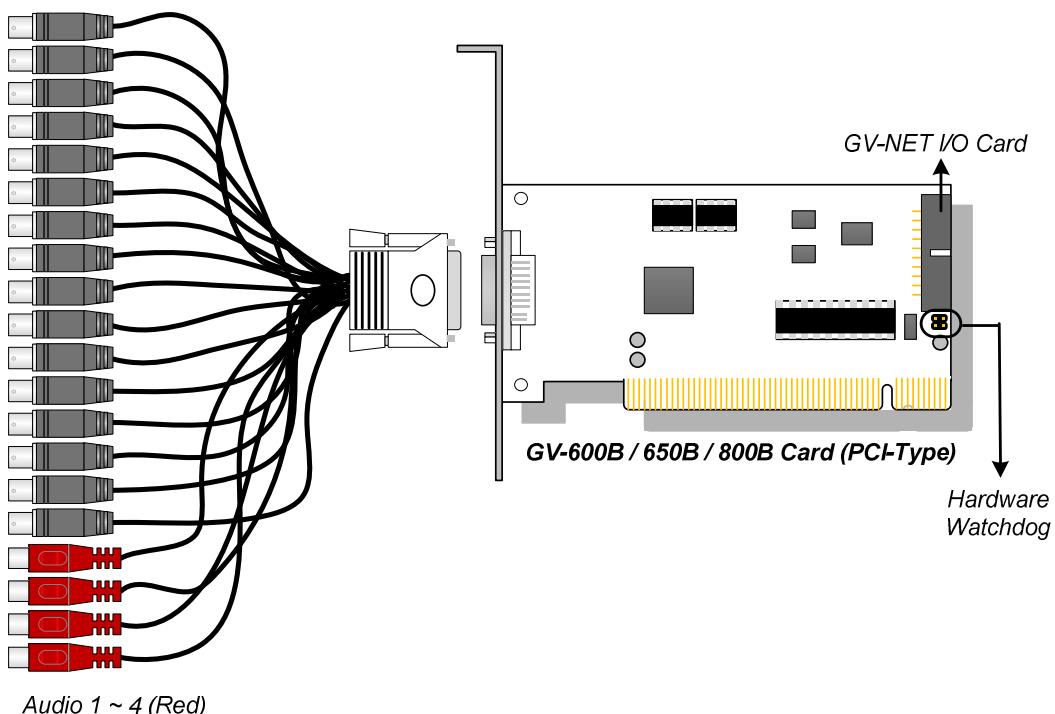


Figure 1

Connecting Two GV-600B / GV-650B / GV-800B Cards

You can install two GV-600B / GV-650B / GV-800B Cards of the same model for up to 32 channels. Master Card is the card with 1-16 channels and Slave Card is that with 17-32 channels. Normally, the card attached to the lower PCI-E slot number will act as Master, and the card attached to the higher PCI-E slot number will act as Slave.

Note:

1. You can only install two cards of the same model for a total of 32 channels.
2. For two-card mode, it is required to use two PCI-E cards.

- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card only (Figure 3).
- **Accessory Card Connection:** Connect the GV-NET/IO Card to the Master Card only.

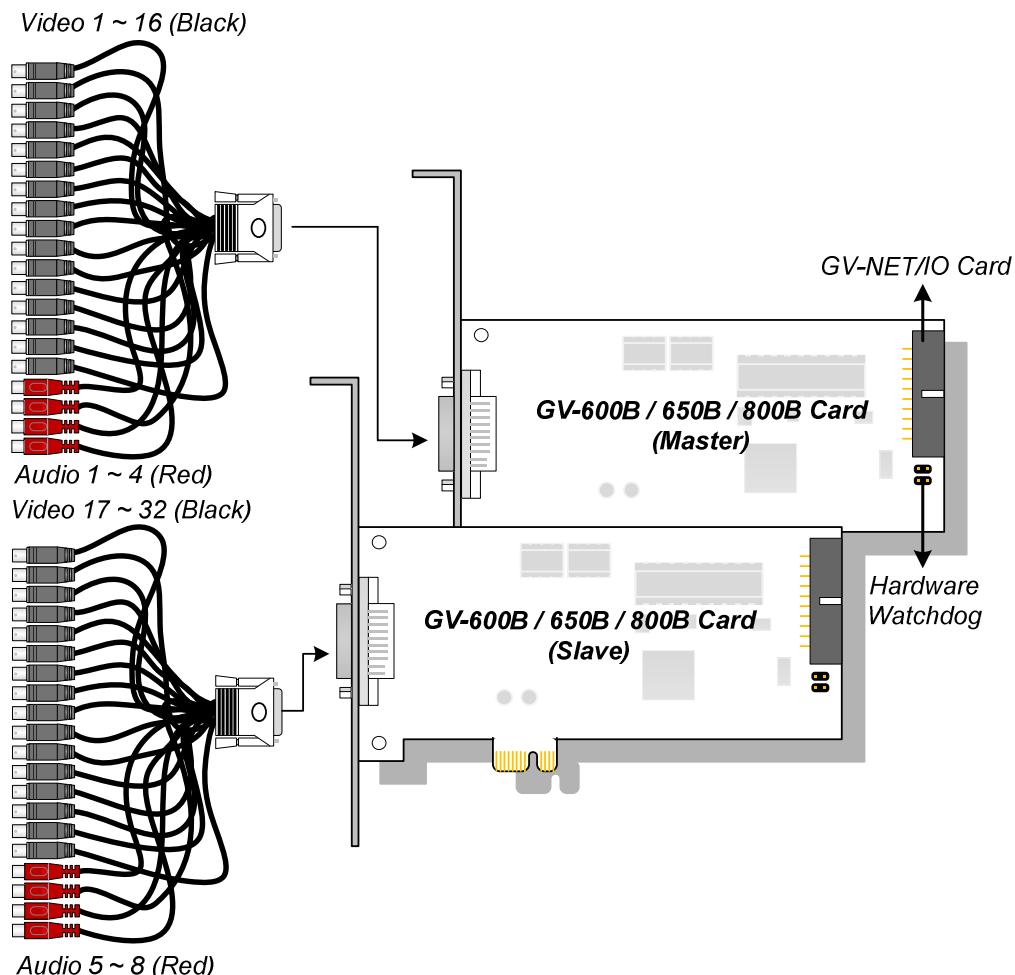


Figure 2

Connecting Hardware Watchdog

Insert the Hardware Watchdog Jumper Wire to the 2-pin connectors on the Card. The (+) pin on the Card must connect to the Reset (+) pin on the motherboard, and the (-) pin on the Card to the Ground (-) pin on the motherboard. Ensure the connection is correct; otherwise the hardware watchdog will not work.

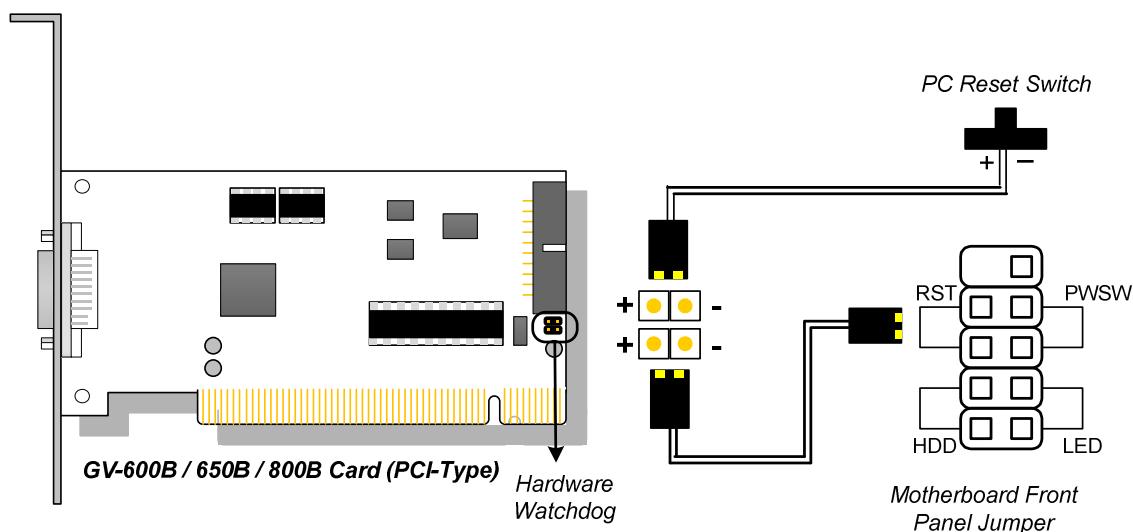


Figure 3

Note: To locate the motherboard's Reset (+) pin and (-) pin, please refer to the motherboard's user manual.

Installing Drivers

After installing the GV-600B / GV-650B / GV-800B Card in the computer, insert the software DVD. The DVD will run automatically and an installation window will pop up. Select **Install or Remove GeoVision GV-Series Driver**, and select **Install or Remove GeoVision GV-Series Card Drivers** to install card drivers.

To verify the drivers are installed correctly, go to Windows Device Manager and see if their entries are listed. The image below is an example of installing one GV-600B card.

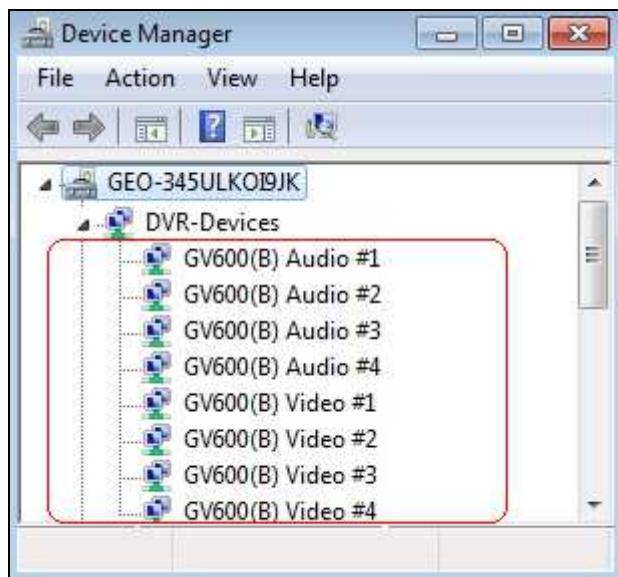


Figure 4

Expand the **DVR-Devices** field, you can see:

Card Models	Entry
GV-600B	GV600(B) Audio #1 ~ 4 GV600(B) Video #1 ~ 4
GV-600B x 2	GV600(B) Audio #1 GV600(B) Video #1 GV600(B) Audio #1 GV600(B) Video #1 GV600(B) Audio #2 GV600(B) Video #2 GV600(B) Audio #2 GV600(B) Video #2 GV600(B) Audio #3 GV600(B) Video #3 GV600(B) Audio #3 GV600(B) Video #3 GV600(B) Audio #4 GV600(B) Video #4 GV600(B) Audio #4 GV600(B) Video #4

GV-650B	GV650(B) Audio #1 ~ 4 GV650(B) Video #1 ~ 4	
GV-650B x 2	GV650(B) Audio #1 GV650(B) Audio #1 GV650(B) Audio #2 GV650(B) Audio #2 GV650(B) Audio #3 GV650(B) Audio #3 GV650(B) Audio #4 GV650(B) Audio #4	GV650(B) Video #1 GV650(B) Video #1 GV650(B) Video #2 GV650(B) Video #2 GV650(B) Video #3 GV650(B) Video #3 GV650(B) Video #4 GV650(B) Video #4
GV-800B	GV800(B) Audio #1 ~ 4 GV800(B) Video #1 ~ 4	
GV-800B x 2	GV800(B) Audio #1 GV800(B) Audio #1 GV800(B) Audio #2 GV800(B) Audio #2 GV800(B) Audio #3 GV800(B) Audio #3 GV800(B) Audio #4 GV800(B) Audio #4	GV800(B) Video #1 GV800(B) Video #1 GV800(B) Video #2 GV800(B) Video #2 GV800(B) Video #3 GV800(B) Video #3 GV800(B) Video #4 GV800(B) Video #4

Specifications

			GV-600B	GV-650B	GV-800B			
Interface	PCI, PCI-E x1							
Input Type	DVI							
Video Input	4, 8, 16 Cams							
Audio Input	4 Channels							
Recording Rate	CIF	NTSC	4-port: 30 fps 16-port: 30 fps	4-port: 60 fps 16-port: 60 fps	4-port: 120 fps 16-port: 120 fps			
		PAL	4-port: 25 fps 16-port: 25 fps	4-port: 50 fps 16-port: 50 fps	4-port: 100 fps 16-port: 100 fps			
	D1	NTSC	4-port: 30 fps 16-port: 15 fps	4-port: 60 fps 16-port: 30 fps	4-port: 120 fps 16-port: 60 fps			
		PAL	4-port: 25 fps 16-port: 12.5 fps	4-port: 50 fps 16-port: 25 fps	4-port: 100 fps 16-port: 50 fps			
Display Rate	CIF	NTSC	4-port: 30 fps 16-port: 30 fps	4-port: 60 fps 16-port: 60 fps	4-port: 120 fps 16-port: 120 fps			
		PAL	4-port: 25 fps 16-port: 25 fps	4-port: 50 fps 16-port: 50 fps	4-port: 100 fps 16-port: 100 fps			
	D1	NTSC	4-port: 30 fps 16-port: 15 fps	4-port: 60 fps 16-port: 30 fps	4-port: 120 fps 16-port: 60 fps			
		PAL	4-port: 25 fps 16-port: 12.5 fps	4-port: 50 fps 16-port: 25 fps	4-port: 100 fps 16-port: 50 fps			
Video Resolution		NTSC	704 x 480, 704 x 480 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 240, 320 x 240					
		PAL	704 x 576, 704 x 576 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 288, 320 x 240					
Video Compression Format	Geo MPEG4, Geo H264							
Audio Format	16 kHz / 16-bit, 32 kHz / 16-bit							
GV-NET/IO Card Support	Yes							
Dimensions (W x H)	PCI-Type: 120 x 65 mm / 4.7 x 2.5 in PCI-E Type: 120 x 82 mm / 4.7 x 3.2 in							

			GV-600B x 2	GV-650B x 2	GV-800B x 2
Interface	PCI-E x1				
Input Type	DVI				
Video Input	8, 12, 16, 20, 24, 32 Cams				
Audio Input	8 Channels				
Recording Rate	CIF	NTSC	4+4 port: 60 fps 16+16 port: 60 fps	4+4 port: 120 fps 16+16 port: 120 fps	4+4 port: 240 fps 16+16 port: 240 fps
		PAL	4+4 port: 50 fps 16+16 port: 50 fps	4+4 port: 100 fps 16+16 port: 100 fps	4+4 port: 200 fps 16+16 port: 200 fps
	D1	NTSC	4+4 port: 60 fps 16+16 port: 30 fps	4+4 port: 120 fps 16+16 port: 60 fps	4+4 port: 240 fps 16+16 port: 120 fps
		PAL	4+4 port: 50 fps 16+16 port: 25 fps	4+4 port: 100 fps 16+16 port: 50 fps	4+4 port: 200 fps 16+16 port: 100 fps
Display Rate	CIF	NTSC	4+4 port: 60 fps 16+16 port: 60 fps	4+4 port: 120 fps 16+16 port: 120 fps	4+4 port: 240 fps 16+16 port: 240 fps
		PAL	4+4 port: 50 fps 16+16 port: 50 fps	4+4 port: 100 fps 16+16 port: 100 fps	4+4 port: 200 fps 16+16 port: 200 fps
	D1	NTSC	4+4 port: 60 fps 16+16 port: 30 fps	4+4 port: 120 fps 16+16 port: 60 fps	4+4 port: 240 fps 16+16 port: 120 fps
		PAL	4+4 port: 50 fps 16+16 port: 25 fps	4+4 port: 100 fps 16+16 port: 50 fps	4+4 port: 200 fps 16+16 port: 100 fps
Video Resolution		NTSC	704 x 480, 704 x 480 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 240, 320 x 240		
		PAL	704 x 576, 704 x 576 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 288, 320 x 240		
Video Compression Format	Geo MPEG4, Geo H264				
Audio Format	16 kHz / 16-bit				
GV-NET/IO Card Support	Yes				
Dimensions (W x H)	PCI-E Type: 120 x 82 mm / 4.7 x 3.2 in				